Table J-1. Valley/Foothill Riparian Communities: Potential CALFED Effects and Conservation Measures

Summary Effect of Implementing CALFED Actions and Conservation Measures on Valley/Foothill Riparian Communities: Restoration of up to 235 miles of riparian habitat along river and stream channels in the Delta, Bay, and San Joaquin River Regions, protection and enhancement of up to 14,500 acres of riparian habitat in the Delta, Sacramento River, and San Joaquin River Regions, and enhancement of existing riparian habitats throughout the focus area by reducing populations of invasive non-native plants. An unknown quantity of riparian habitat would also be expected to naturally establish in association with restoration or enhancement of tidal sloughs and channel islands in the Delta and restoration or enhancement of wetlands throughout the focus area. Potential for short-term loss or degradation of existing habitat area and potential for long-term increase in habitat area with implementation of conservation measures to compensate for CALFED impacts, and potential for permanent fragmentation of valley/foothill riparian corridors if new surface-storage facilities are constructed in existing habitat areas.

Associated Evaluated Species: Least bell's vireo, bald eagle, Alameda whipsnake, giant garter snake, California red-legged frog, valley elderberry longhorn beetle, valley elderberry longhorn beetle critical habitat, ringtail, riparian brush rabbit, little willow flycatcher, bank swallow, western yellow-billed cuckoo, white-tailed kite, golden eagle, Swainson's hawk, San Joaquin Valley woodrat, greater western mastiff-bat, California yellow warbler, yellow-breasted chat, long-eared owl, short-eared owl, Cooper's hawk, osprey, double-crested cormorant (rookery), western pond turtle, foothill yellow-legged frog, black-crowned night heron (rookery), great blue heron (rookery), great egret (rookery), and snowy egret (rookery), marsh checkerbloom, Northern California black walnut (native stands), slough thistle, silky cryptantha, delta coyote-thistle.

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
Delta Region					
Associated Evaluated Species: bald eagle, California red-legged frog, valley elderberry longhorn beetle, riparian brush rabbit, little willow flycatcher, western yellow-billed cuckoo, white-tailed kite, Swainson's hawk, San Joaquin Valley woodrat, California yellow warbler, short-eared owl, Cooper's hawk, osprey, double-crested cormorant (rookery), giant garter snake, western pond turtle, Northern California black walnut (native stands), slough thistle, black-crowned night heron (rookery), great blue heron (rookery), great egret (rookery), and snowy egret (rookery).					
Summary Programmatic Action Outcomes E15a, E16a, E17, E19-E22, E24, E25, E28, Q1, Q2, and Q7 are likely to have no discernable effect on valley/foothill riparian communities in the Delta Region.					
Ecosystem Restoration Program					
E1. Provide for more natural river flows and Bay-Delta freshwater inflow peaks in fall, winter, and spring of all but critical years.	E010101, E010102, E010103, E010104	Potential for increase in habitat area in some locations where timing and magnitude of flows are sufficient to result in overbank flooding and provide the hydrologic conditions necessary for the natural establishment of riparian vegetation (BE1).	Likely to be no discernable adverse effects on existing habitat areas and associated evaluation species (N/E).	None.	Potential for localized improvement in hydrologic conditions for support of riparian vegetation.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
E4. Provide more natural Delta hydraulic conditions (internal flow and velocity patterns) by altering channel configurations (e.g., setback levees) and physical barriers to channel flow.	E010601, E010602, E010603, E010604, E010605, E010606, E010607	Potential for increase in habitat area if modified channels include features (e.g., benches along setback levees) that would allow for the natural reestablishment of riparian vegetation (BE2).	Potential for permanent loss or degradation of existing habitat area on or near levees if construction activities result in removal of riparian vegetation (AE1).	To the extent practicable, avoid disturbance to existing habitat areas (M1).	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures. Potential for long-term increase in habitat area as a result of implementing channel modifications.
				Restore or enhance 2-5 acres of habitat for every acre of existing habitat near affected areas before implementing actions that could result in the loss or degradation of habitat (M2).	
				To the extent consistent with ERP objectives, include project design features that allow for onsite reestablishment and long-term maintenance of riparian vegetation following project construction (M3).	
			Construction-related activities associated with implementing actions could result in take of evaluated species (AE2).	To the extent practicable, avoid construction activities during the breeding period of species that could be adversely affected by the actions (M4).	

D-051366

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
				To the extent practicable, avoid direct disturbance to populations and individuals of evaluated plant species (M5). When feasible, establish and protect additional populations of evaluated plant species in suitable nearby habitat areas before construction activities are implemented that could affect existing populations or individuals (M6).	
E5a. Restoration of up to 7,500 acres of tidal shallow-water habitat.	E010401, E010402, E010403, E010404, E010405, E010406, E010407, E010901, E010902, E010903, E010904, E010905, E010906, E015201, E015202	Potential for increases in habitat area along the upper elevational zones of areas along modified channels and portions of Delta islands that are restored by setting back or breaching levees (BE3).	AE1. AE2.	M1. M2. M3. M4. M5.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures. Potential for long-term substantial increase in habitat area as a result of natural reestablishment of riparian vegetation in association with restored shallow-water habitat area.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
				M6.	
E8. Restoration of 30,000 to 45,000 acres of tidal fresh emergent wetland.	E010401, E010402, E010404, E010405, E010407, E010606, E011101, E011102, E011201, E011202, E011401, E011402, E011403, E011404, E011405, E015202	BE3.	AE1.	M1.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures. Potential for long-term substantial increase in habitat area as a result of natural reestablishment of riparian vegetation in association with restored shallow-water habitat area.
				M2.	
				M3.	
			AE2.	M4.	
				M5.	
				M6.	

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
E9. Maintenance of existing and restoration of 200-800 acres of channel islands and associated habitats.	E011201, E011202, E015002, E016001, E016002	Potential for long-term protection of channel islands that currently support riparian vegetation from potential loss to erosion (BE4).	Potential for permanent loss of riparian habitat along shorelines of channel islands that are riprapped to prevent erosion (AE3).	M1.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures. Long-term protection of riparian habitat from erosion on some channel islands. Potential for long-term increases in habitat area resulting from the natural reestablishment of riparian vegetation in association with restored channel islands.
		Potential for restoration of some riparian habitat area in association with restoration of channel islands (BE5).		M2.	
				M3.	
			AE2.	M4.	
				M5.	
				M6.	

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
E10a. Restoration of 85-190 miles of tidal sloughs.	E015201, E015202, E011101, E011102	Potential for increase in habitat area along upper elevational zones of restored wetland habitats (BE6).	AE1. AE2.	M1. M2. M3. M4. M5. M6.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures. Potential for increase in riparian habitat area along margins of restored sloughs.
E11. Restoration of up to 19,600 acres of nontidal freshwater emergent wetland.	E010403, E010406, E011001, E011002, E011003, E011004, E011005, E011006, E011007, E011301, E011302, E011303, E011304, E011305	BE6.	AE2.	M4.	Potential for increase in riparian habitat area along margins of restored marshes.
E13a. Enhancement of up to 4,000 acres of existing and restoration and management of up to 28,000 acres of seasonal wetlands for wildlife.	E010403, E010406, E011501, E011502, E011503, E011504, E011505, E011506, E011507, E011508, E011509, E011510, E017201, E017202	BE6.	AE2.	M4.	Potential for increase in riparian habitat area along margins of restored or enhanced seasonal wetlands.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
		Potential for enhancement of existing riparian habitats associated with existing seasonal wetlands if wetland enhancement activities also improve the management and quality of associated riparian habitats (BE7).			
E15a. Restoration of 48–85 miles of riparian habitat along channels, restoration of riparian habitat in association with setback levees, protection of 500 acres of existing riparian forest, and reduction of current invasive riparian plants by 50%.	E010501, E010502, E010606, E011101, E011102, E011201, E011202, E011601, E011602, E011603, E011604, E011605, E011606, E011607, E011608, E011609, E014901, E015301, E015302, E015303	Substantial increase in riparian habitat area and suitable habitat for associated species (BE8). Enhancement of existing riparian habitat values as a result of controlling invasive non-native plants (BE9).	AE1. AE2.	M1. M2. M3. M4. M5. M6.	Long-term substantial increase in riparian habitat area and increased connectivity among existing habitat corridors. Enhancement of long-term protection of existing habitat values from the adverse effects of invasive non-native plants.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
				To the extent practicable, remove or exclude evaluation amphibian and reptile species from construction corridors before construction is initiated (M7).	
E18a. Cooperative management of 40,000–75,000 acres of agricultural lands to enhance habitat values for waterfowl and other associated species.	E011901, E011902, E011903, E011904, E011905, E011906, E011907, E007101	Potential for enhancement and long-term protection of existing riparian habitats associated with agricultural lands if enhancement activities also improve the management and quality of associated riparian habitats (BE10).	N/E	None.	Potential for enhancement and long-term protection of riparian habitats associated with agricultural lands.
E27a. Reduction in the concentrations and loadings of contaminants in the aquatic environment by 25%–50%.	E015701, E015702	Reduction in the use of herbicides and pesticides in or near existing habitat areas could improve the vigor of associated plant populations and result in an increase in invertebrate populations that are adversely affected by these agents (BE11).	N/E	None.	Implementation of the proposed actions would most likely have no discernable effect on the evaluation species' numbers or distribution.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
Levee System Integrity Program					
L1. Improvement and maintenance of Delta levees.	L010101, L010102, L010201, L010202, L010301	Long-term protection of existing habitat areas from flooding that would result from levee failures (BE12).	AE1. AE2.	M1. M2. M3. M4. M5. M6.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures. Long-term protection of existing habitat areas from flooding that would be associated with levee failures.
L2. Reduction in the risk to levee stability from subsidence.	L010401, L010402	Potential beneficial effects of the program are not analyzed. The type and magnitude of potential beneficial effects would depend on the type of specific program actions that are implemented (N/A).	Potential adverse effects of the program are not analyzed. The type and magnitude of potential adverse effects would depend on the type of specific program actions that are implemented (N/A).		Potential program effects cannot be evaluated.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
Water Quality Program					
Q4. Reduction of pesticide loadings in the aquatic environment.	Q010501	BE11.	N/E	None.	Implementation of the proposed actions would most likely have no discernable effect on the evaluation species' numbers or distribution.
Water Use Efficiency Program					
W1. Support implementation of water management techniques that increase the effectiveness of water-use management and efficiency for agricultural uses.	None.	Likely to be no discernable beneficial effects on existing habitat areas and associated evaluation species (N/E).	Potential for localized loss of relatively small habitat areas where riparian vegetation is supported primarily by seeps or runoff associated with existing inefficiencies in the use agricultural water (AE4).	M1. M2.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures.
W2. Support implementation of measures that increase agricultural production per unit of water used, protect water quality, or increase environmental benefits while meeting agricultural needs.	None.	N/E	AE4.	M1. M2.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
W3. Provide planning and technical assistance, financing assistance, and assurances for development and implementation of water management plans and best management practices to urban water agencies.	None.	N/A	N/A		Potential program effects cannot be evaluated.
W4. Support development and implementation of water-recycling projects.	None.	N/A	N/A		Potential program effects cannot be evaluated.
Water Transfer Program					
T1. Implement a framework of actions, policies, and processes that will facilitate transfers and the further development of a statewide water-transfer market.	None.	Potential for increase in riparian habitat area if water transfers result in augmenting streamflows to alter hydrology of streams sufficiently to allow the natural establishment of riparian vegetation (BE13).	Potential for loss or degradation of existing riparian habitat areas if water is transferred from uses that currently support riparian vegetation (AE5).	To the extent consistent with program objectives, avoid implementing transfers of water from sources that support riparian vegetation (M8). M2.	Potential for short-term loss or degradation of existing habitat area if water is transferred from uses currently supporting riparian vegetation and long-term increase in habitat area as a result of implementing conservation measures. Potential for long-term increases in habitat area if water is transferred to uses that would support riparian vegetation.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
Watershed Management Program					
M1. Fund and implement watershed restoration, maintenance, conservation, and monitoring activities.	None.	N/A	N/A		Potential program effects cannot be evaluated.
Conveyance Facilities					
C1. Construct and operate modifications to existing south-Delta conveyance features.	C010101, C010102, C010103, C010104, C010105, C010106, C010107, C010108	N/E	Potential for permanent loss or degradation of riparian habitat along channels upstream of operable barriers if operation of barriers adversely affects the hydrology supporting existing riparian vegetation (AE6). Construction of interties and supporting infrastructure between existing conveyance facilities and export pumps could result in the permanent loss of riparian vegetation (AE7). AE2.	To the extent consistent with program objectives, operate barriers in a manner that will not adversely affect the hydrology supporting riparian vegetation upstream of barriers (M9). M1. M2. M3. M4. M5. M6. M7.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
C2. Construct and operate modifications to existing north-Delta conveyance features.	C020101, C020102, C020103	Potential for long-term increase in riparian habitat area if conveyance channel capacity is increased by setting back channel levees (BE14).	Construction of conveyance facilities and associated infrastructure could result in short-term or permanent loss or degradation of riparian habitat (AE8). AE2.	M1. M2. M3. M4. M5. M6. M7.	Potential for short-term loss of riparian habitat and, depending on design of conveyance features, potential for long-term increase in habitat area. Some long-term increase in habitat area as a result of implementing conservation measures.
C3 Construct and operate an isolated conveyance facility from the Sacramento River along the east side of the Delta to Clifton Court Forebay.	C030101	N/E	AE9. AE2.	M1. M2. M3. M4. M5.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
				M6. M7.	
Storage Facilities					
S1. Construct and operate enlarged or new surface storage facilities.	None.	Potential for increase in riparian habitat area if design and operation of storage islands provide suitable substrate and hydrologic conditions to support the natural and long-term establishment of riparian vegetation along storage island levees and shorelines (BE15).	Potential for permanent loss of riparian vegetation present on Delta islands that are used for storage (AE9). AE2.	To the extent consistent with program objectives, select Delta islands that support little or no riparian vegetation for use as storage facilities (M10). M2. M3. M4. M6. To the extent practicable, trap and relocate evaluated wildlife species that would be unlikely to escape from the inundation area of new reservoirs to suitable nearby habitat areas (M11).	Potential for short-term loss of riparian habitat and, depending on design and operation of storage facilities, potential for long-term increase in habitat area. Long-term increase in habitat area as a result of implementing conservation measures.
Water Operations					

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
01. Implement operating criteria needed to improve water management for beneficial uses.	None.	N/A	N/A		Potential program effects cannot be evaluated.
02. Implement an Environmental Water Account to provide operational flexibility to achieve environmental benefits.	None.	N/A	N/A		Potential program effects cannot be evaluated.
Bay Region					
Associated Evaluated Species: bald eagle, California red-legged frog, valley elderberry longhorn beetle, ringtail, little willow flycatcher, white-tailed kite, golden eagle, Swainson's hawk, greater western mastiff-bat, California yellow warbler, yellow-breasted chat, long-eared owl, short-eared owl, Cooper's hawk, osprey, double-crested cormorant (rookery), western pond turtle foothill yellow-legged frog, marsh checkerbloom, Northern California black walnut (native stands), great blue heron (rookery), great egret (rookery), and snowy egret (rookery).					
Summary Programmatic Action Outcomes E1, E5b, E7, E10b, E12, E14, E16b, E21, E22, E24, E25, E28, E30, L3, Q2, Q7, and Q8 are likely to have no discernable effect on valley/foothill riparian communities in the Bay Region.					
Ecosystem Restoration Program					
E13b. Restoration of 1,000-1,500 acres of seasonal wetland and enhancement and management of 40,000-50,000 acres of existing seasonal wetlands for wildlife.	E021501, E021502, E021503	BE7.	AE2.	M4.	Potential for increase in riparian habitat area along margins of enhanced seasonal wetlands.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
E15b. Restoration of 50-75 miles of riparian habitat along channels and reduction of populations of invasive non-native riparian plants by 50%.	E021601, E025301, E025302	BE8. BE9.	AE1. AE2.	M1. M2. M4. M5. M6.	Long-term substantial increase in riparian habitat area and increased connectivity among existing habitat corridors. Long-term protection of existing habitat values from the adverse effects of invasive non-native plants.
Water Quality Program					
Q4. Reduction of pesticide loadings in the aquatic environment.	Q020501	BE11.	N/E.		Implementation of the proposed actions would most likely have no discernable effect on the evaluation species' numbers or distribution.
Water Use Efficiency Program					
W1. Support implementation of water management techniques that increase the effectiveness of water-use management and efficiency for agricultural uses.	None.	N/E.	AE4.	M1. M2.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
W2. Support implementation of measures that increase agricultural production per unit of water used, protect water quality, or increase environmental benefits while meeting agricultural needs.	None.	N/E.	AE4.	M1. M2.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures.
W3. Provide planning and technical assistance, financing assistance, and assurances for development and implementation of water management plans and best management practices to urban water agencies.	None.	N/A.	N/A.		Potential program effects cannot be evaluated.
W4. Support development and implementation of water-recycling projects.	None.	N/A.	N/A.		Potential program effects cannot be evaluated.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
Water Transfer Program					
T1. Implement a framework of actions, policies, and processes that will facilitate transfers and the further development of a statewide water-transfer market.	None.	BE13.	AE5.	M8. M2.	Potential for short-term loss or degradation of existing habitat area if water is transferred from uses currently supporting riparian vegetation and long-term increase in habitat area as a result of implementing conservation measures. Potential for long-term increases in habitat area if water is transferred to uses that would support riparian vegetation.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
Watershed Management Program					
M1. Fund and implement watershed restoration, maintenance, conservation, and monitoring activities.	None.	N/A.	N/A.		Potential program effects cannot be evaluated.
Sacramento River Region					
Associated Evaluated Species: bald eagle, California red-legged frog, valley elderberry longhorn beetle, valley elderberry longhorn beetle critical habitat, ringtail, little willow flycatcher, bank swallow, western yellow-billed cuckoo, white-tailed kite, golden eagle, Swainson's hawk, greater western mastiff-bat, California yellow warbler, yellow-breasted chat, long-eared owl, short-eared owl, Cooper's hawk, osprey, double-crested cormorant (rookery), giant garter snake, western pond turtle, foothill yellow-legged frog, Northern California black walnut (native stands), black-crowned night heron (rookery), great blue heron (rookery), great egret (rookery), snowy egret (rookery) and silky cryptantha.					
Summary Programmatic Action Outcomes E3, E16c, E22-E26, Q1, Q2, and S2 are likely to have no discernable effect on valley/foothill riparian communities in the Sacramento River Region.					
Ecosystem Restoration Program					
E1. Provide for more natural river flows and Bay-Delta freshwater inflow peaks in fall, winter, and spring of all but critical years.	E030101, E030102, E040101, E040102, E040103, E040104, E044701, E044703, E050101, E070101, E070102, E070103, E070104, E070105, E070106, E080101, E080102, E080103, E080104, E090101, E090102, E090103, E090104, E090105, E090106, E090107, E100101, E100102	BE1.	N/E.	None.	Potential for localized improvement in hydrology for support of riparian vegetation.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
E2. Improvement in the supply of sediment to rivers and streams necessary for providing spawning gravels and rehabilitation of related ecological processes (e.g., stream meander) and floodplain habitats (e.g., riparian habitats).	E030201, E030202, E030301, E030302, E030303, E030604, E031602, E040201, E040202, E040203, E040301, E040402, E050201, E050202, E050203, E060401, E070201, E070202, E070203, E080201, E080202, E080203, E080303, E090201, E090401, E090403, E090404, E090407, E090409, E100201, E100202, E105101	Potential for increased riparian habitat area if increased sediment transport increases the number and area of point bars and other depositional features along channels that would provide suitable substrates for the natural establishment of riparian vegetation (BE16).	Potential for loss or degradation of existing habitat area along channels if construction activities result in removal of riparian vegetation (AE10). AE2.	M1. M2. M4. M5. M6. M7.	Potential for long-term increase in riparian habitat area and increased connectivity among existing habitat corridors along treated streams and rivers. Long-term increase in habitat area as a result of implementing conservation measures.
E6. Restoration and maintenance of riverine aquatic habitats.	E031602, E030301, E030302, E030303, E030604, E040301, E040402, E050201, E050202, E050203, E050301, E050401, E050402, E050403, E050404, E050405, E060401, E070201, E070202, E070203, E080301, E080302, E080303, E080401, E080402, E090401, E090402, E090403, E090404, E090407, E090408, E090408, E091604, E091605, E090201	BE8.	AE1.	M1.	Long-term substantial increase in riparian habitat area and increased connectivity among existing habitat corridors.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
			AE2.	M2. M4. M5. M6. M7.	
E13c. Enhancement and management of up to 73,325 acres of existing seasonal wetlands for wildlife.	E061501, E061502, E071501, E071502, E081501, E081502, E090405, E090406, E091501, E091502	BE7.	AE2.	M4.	Potential for increase in riparian habitat area along margins of enhanced seasonal wetlands.
E15c. Protection and enhancement of 9,000–13,000 acres of riparian habitat in meander zones along the Sacramento River and its tributaries; protection, enhancement, and restoration of riparian habitat and shaded riverine aquatic (SRA) cover along other reaches of the Sacramento River and its tributaries; and reduction of populations of non-native invasive plants.	E031601, E031602, E031603, E031604, E031605, E030302, E030303, E030304, E035301, E035302, E040301, E040401, E041601, E041602, E041603, E051601, E051602, E051603, E061601, E065301, E071601, E071603, E071604, E080301, E080302, E080303, E080401, E081601, E081602, E081603, E090401, E090403, E090404, E090407, E091601, E091602, E091603, E091606, E095301, E101601, E101602, E101603, E101604, E105301	BE8. BE9.	AE1. AE2.	M1. M2. M4.	Long-term substantial increase in riparian habitat area and increased connectivity among existing habitat corridors. Enhancement and long-term protection of existing habitat values from the adverse effects of invasive non-native plants.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
				M5. M6. M7.	
E18b. Cooperative management of up to 298,643 acres of agricultural lands to enhance habitat values for waterfowl and other associated species.	E061901, E061902, E061903, E071901, E071902, E071903, E081901, E091901, E091902	BE10.	N/E.	None.	Potential for enhancement and long-term protection of riparian habitats associated with agricultural lands.
E27b. Reduction in the concentrations and loadings of contaminants in the aquatic environment.	E035702, E035703, E035704, E095701, E095702, E105701, E105702	BE11.	N/E.	None.	Implementation of the proposed actions would most likely have no discernable effect on the evaluation species' numbers or distribution.
Water Quality Program					
Q3. Reduction of mercury loadings in water and sediment.	Q030301, Q030302, Q040301, Q040302, Q050301, Q050302, Q060301, Q060302, Q070301, Q070302, Q080301, Q080302, Q090301, Q090302, Q100301, Q100302	N/E.	Potential for loss or degradation of riparian habitat if reduction of contaminant loadings requires disturbance to stream channels that support riparian vegetation (AE11). AE2.	M1. M2. M4. M5. M6.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
				M7.	
Q4. Reduction of pesticide loadings in the aquatic environment.	Q030501, Q040501, Q050501, Q060501, Q070501, Q080501, Q090501, Q100501	BE11.	N/E.		Implementation of the proposed actions would most likely have no discernable effect on the evaluation species' numbers or distribution.
Q7. Reduction of cadmium, copper, and zinc loadings to levels that do not adversely affect Bay-Delta species or beneficial uses of water.	Q030801, Q040801, Q040802, Q050801, Q050802, Q060801, Q060802, Q070801, Q070802, Q080801, Q080801, Q090801, Q090802, Q100801, Q100802	N/E.	AE6. AE2.	M1. M2. M4. M5. M6. M7.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures.
Water Use Efficiency Program					
W1. Support implementation of water management techniques that increase the effectiveness of water-use management and efficiency for agricultural uses.	None.	N/E.	AE4.	M1. M2.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
W2. Support implementation of measures that increase agricultural production per unit of water used, protect water quality, or increase environmental benefits while meeting agricultural needs.	None.	N/E.	AE4.	M1. M2.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures.
W3. Provide planning and technical assistance, financing assistance, and assurances for development and implementation of water management plans and best management practices to urban water agencies.	None.	N/A.	N/A.		Potential program effects cannot be evaluated.
W4. Support development and implementation of water-recycling projects.	None.	N/A.	N/A.		Potential program effects cannot be evaluated.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
Water Transfer Program					
T1. Implement a framework of actions, policies, and processes that will facilitate transfers and the further development of a statewide water-transfer market.	None.	BE13.	AE5.	M8. M2.	Potential for short-term loss or degradation of existing habitat area if water is transferred from uses currently supporting riparian vegetation and long-term increase in habitat area as a result of implementing conservation measures. Potential for long-term increases in habitat area if water is transferred to uses that would support riparian vegetation.
Watershed Management Program					
M1. Fund and implement watershed restoration, maintenance, conservation, and monitoring activities.	None.	N/A.	N/A.		Potential program effects cannot be evaluated.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
Storage Facilities					
S1. Construct and operate enlarged or new surface storage facilities.	None.	N/E	Permanent loss of habitat if storage facilities and associated infrastructure are constructed in drainages that support valley/foothill riparian habitat (AE12).	M1.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures. Potential for permanent fragmentation of riparian corridors and disruption in movement patterns of associated wildlife.
				M2.	
			Potential for permanent loss or degradation of riparian habitat downstream of storage reservoirs if storage operations adversely affect current channel hydrology supporting existing riparian vegetation (AE13).	To the extent consistent with program objectives, provide sufficient outflow from storage reservoirs sufficient to support the long-term maintenance of riparian vegetation downstream of storage reservoirs (M12).	
			Fragmentation of riparian corridors and disruption of wildlife movement patterns if storage facilities inundate channels supporting riparian vegetation (AE14)	M1.	
			AE2.	M4.	

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
			Recreation-related activities potentially associated with new storage facilities could result in take of evaluated species (AE15).	M5. M6. M11. Manage recreational uses to avoid or reduce the likelihood for recreation-related impacts on sensitive plant populations and wildlife use areas (M13).	
Water Operations					
01. Implement operating criteria needed to improve water management for beneficial uses.	None.	N/A	N/A		Potential program effects cannot be evaluated.
02. Implement an Environmental Water Account to provide operational flexibility to achieve environmental benefits.	None.	N/A	N/A		Potential program effects cannot be evaluated.
San Joaquin River Region					
Associated Evaluated Species: least bell's vireo, bald eagle, Alameda whipsnake, California red-legged frog, valley elderberry longhorn beetle, ringtail, riparian brush rabbit, little willow flycatcher, bank swallow, western yellow-billed cuckoo, white-tailed kite, golden eagle, Swainson's hawk, delta coyote-thistle, San Joaquin Valley woodrat, greater western mastiff-bat, California yellow warbler, yellow-breasted chat, long-eared owl, short-eared owl, Cooper's hawk, osprey, double-crested cormorant (rookery), giant garter snake, western pond turtle, foothill yellow-legged frog, slough thistle, black-crowned night heron (rookery), great blue heron (rookery), great egret (rookery), and snowy egret (rookery).					
Summary Programmatic Action Outcomes E18c, E22-E26, Q2, Q5-Q8, and S2 are likely to have no discernable effect on valley/foothill riparian communities in the San Joaquin River Region.					

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
Ecosystem Restoration Program					
E1. Provide for more natural river flows and Bay-Delta freshwater inflow peaks in fall, winter, and spring of all but critical years.	E110101, E110102, E110103, E110104, E110105, E110106, E110107, E110108, E110109, E110110, E110205, E110502, E120101, E130103, E130101, E130102, E130104, E130105, E140101, E140102, E140103, E140104	BE1.	N/E.	None.	Potential for localized improvement in hydrology for support of riparian vegetation.
E2. Improvement in the supply of sediment to rivers and streams necessary for providing spawning gravels and rehabilitation of related ecological processes (e.g., stream meander) and floodplain habitats (e.g., riparian habitats).	E110201, E110202, E110203, E110204, E110205, E110206, E110207, E110208, E110209, E130201, E130202, E130203, E130301, E130302, E130303, E130304, E130305, E130306, E130307, E130402, E135601, E140401, E140403	BE16.	AE10. AE2.	M1. M2. M4. M5. M6. M7.	Potential for long-term increase in riparian habitat area and increased connectivity among existing habitat corridors along treated streams and rivers.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
E6. Restoration and maintenance of riverine aquatic habitats.	E110401, E110401, E130301, E130302, E130303, E130304, E130305, E130306, E130307, E130402, E135601, E131601, E131602, E131603, E140401, E140402, E140403	BE8.	AE1. AE2.	M1. M2. M4. M5. M6. M7.	Long-term substantial increase in riparian habitat area and increased connectivity among existing habitat corridors.
E13d. Protection and enhancement of up to 172,800 acres of seasonal wetlands in the San Joaquin River Ecological Management Zone and protection and enhancement of existing seasonal wetlands elsewhere in the San Joaquin River Region.	E111501, E121501, E121502, E141501, E141502	BE7.	AE2.	M4.	Potential for increase in riparian habitat area along margins of enhanced seasonal wetlands.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
E15d. Restore up to 4,720 acres of riparian and shaded riverine aquatic habitat; protection and enhancement of up to 1,000 acres of riparian habitat in meander zones along San Joaquin River tributaries; restoration of up to 75 miles of riparian habitat along the San Joaquin River and its tributaries; protection, enhancement, and restoration of riparian habitat and SRA cover along other reaches of the San Joaquin River and its tributaries; and reduction of populations of non-native invasive plants along the northern tributaries to the San Joaquin River.	E110401, E111601, E111602, E111603, E111604, E111605, E111606, E111607, E111608, E111609, E111610, E111611, E111612, E111613, E111614, E111615, E115301, E121601, E121602, E121603, E124901, E130301, E130302, E130303, E130304, E130305, E130306, E130307, E130401, E131601, E131602, E131603, E134101, E134103, E140401, E140402, E140403, E141601	BE8. BE9.	AE1. AE2.	M1. M2. M4. M5. M6. M7.	Long-term substantial increase in riparian habitat area and increased connectivity among existing habitat corridors. Enhancement and long-term protection of existing habitat values from the adverse effects of invasive non-native plants.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
E27b. Reduction in the concentrations and loadings of contaminants in the aquatic environment.	E115701, E115702, E115703, E125701, E125702	BE11.	N/E.	None.	Implementation of the proposed actions would most likely have no discernable effect on the evaluation species' numbers or distribution.
E29. Enhancement of habitat conditions for the riparian brush rabbit in occupied habitat areas at and near Caswell State Park on the Stanislaus River.	E134101, E134102, E134103, E134104, E134105	Localized increase and enhancement of riparian habitat suitable for the riparian brush rabbit along the lower Stanislaus River (BE17).	AE2.	M4. M7.	Localized increase in riparian habitat area and restoration and enhancement of suitable habitat area for the riparian brush rabbit.
Water Quality Program					
Q4. Reduction of pesticide loadings in the aquatic environment.	Q120501, Q130501, Q140501, Q140502	BE11.	N/E.	None.	Implementation of the proposed actions would most likely have no discernable effect on the evaluation species' numbers or distribution.
Water Use Efficiency Program					
W1. Support implementation of water management techniques that increase the effectiveness of water-use management and efficiency for agricultural uses.	None.	N/E.	AE4.	M1. M2.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
W2. Support implementation of measures that increase agricultural production per unit of water used, protect water quality, or increase environmental benefits while meeting agricultural needs.	None.	N/E.	AE4.	M1. M2.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures.
W3. Provide planning and technical assistance, financing assistance, and assurances for development and implementation of water management plans and best management practices to urban water agencies.	None.	N/A.	N/A.		Potential program effects cannot be evaluated.
W4. Support development and implementation of water-recycling projects.	None.	N/A.	N/A.		Potential program effects cannot be evaluated.

D-051396

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
Water Transfer Program					
T1. Implement a framework of actions, policies, and processes that will facilitate transfers and the further development of a statewide water-transfer market.	None.	BE13.	AE5.	M8. M2.	Potential for short-term loss or degradation of existing habitat area if water is transferred from uses currently supporting riparian vegetation and long-term increase in habitat area as a result of implementing conservation measures. Potential for long-term increases in habitat area if water is transferred to uses that would support riparian vegetation.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
Watershed Management Program					
M1. Fund and implement watershed restoration, maintenance, conservation, and monitoring activities.	None.	N/A.	N/A.		Potential program effects cannot be evaluated.
Storage Facilities					
S1. Construct and operate enlarged or new surface storage facilities.	None.	N/E	AE12. AE13. AE14. AE2.	M1. M2. M11. M1. M4. M5. M6. M11.	Potential for short-term loss of habitat and long-term increase in habitat area with implementation of conservation measures. Potential for permanent fragmentation of riparian corridors and disruption in movement patterns of associated wildlife.

Table J-1. Continued

Summary Programmatic Action Outcomes	Applicable Programmatic Actions	Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program	Overall Effect of Summary Programmatic Action Outcomes with Conservation Measures
			AE15.	M13.	
Water Operations					
01. Implement operating criteria needed to improve water management for beneficial uses.	None.	N/A	N/A		Potential program effects cannot be evaluated.
02. Implement an Environmental Water Account to provide operational flexibility to achieve environmental benefits.	None.	N/A	N/A		Potential program effects cannot be evaluated.

Contributors to the development of this table: Pete Rawlings and Gerrit Platenkamp of Jones & Stokes Associates.

Table J-2. Key to Table J-1 Potential Beneficial Effects, Potential Adverse Effects, and Conservation Measures Codes

Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program
Potential for increase in habitat area in some locations where timing and magnitude of flows are sufficient to result in overbank flooding and provide the hydrologic conditions necessary for the natural establishment of riparian vegetation (BE1).	Potential for permanent loss or degradation of existing habitat area on or near levees if construction activities result in removal of riparian vegetation (AE1).	To the extent practicable, avoid disturbance to existing habitat areas (M1).
Potential for increase in habitat area if modified channels include features (e.g., benches along setback levees) that would allow for the natural reestablishment of riparian vegetation (BE2).	Construction-related activities associated with implementing actions could result in take of evaluated species (AE2).	Restore or enhance 2-5 acres of habitat for every acre of existing habitat near affected areas before implementing actions that could result in the loss or degradation of habitat (M2).
Potential for increases in habitat area along the upper elevational zones of areas along modified channels and portions of Delta islands that are restored by setting back or breaching levees (BE3).	Potential for permanent loss of riparian habitat along shorelines of channel islands that are riprapped to prevent erosion (AE3).	To the extent consistent with ERP objectives, include project design features that allow for onsite reestablishment and long-term maintenance of riparian vegetation following project construction (M3).
Potential for long-term protection of channel islands that currently support riparian vegetation from potential loss to erosion (BE4).	Potential for localized loss of relatively small habitat areas where riparian vegetation is supported primarily by seeps or runoff associated with existing inefficiencies in the use agricultural water (AE4).	To the extent practicable, avoid construction activities during the breeding period of species that could be adversely affected by the actions (M4).
Potential for restoration of some riparian habitat area in association with restoration of channel islands (BE5).	Potential for loss or degradation of existing riparian habitat areas if water is transferred from uses that currently support riparian vegetation (AE5).	To the extent practicable, avoid direct disturbance to populations and individuals of evaluated plant species (M5).

Table J-2. Continued

Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program
Potential for increase in habitat area along upper elevational zones of restored wetland habitats (BE6).	Potential for permanent loss or degradation of riparian habitat along channels upstream of operable barriers if operation of barriers adversely affects the hydrology supporting existing riparian vegetation (AE6).	When feasible, establish and protect additional populations of evaluated plant species in suitable nearby habitat areas before construction activities are implemented that could affect existing populations or individuals (M6).
Potential for enhancement of existing riparian habitats associated with existing seasonal wetlands if wetland enhancement activities also improve the management and quality of associated riparian habitats (BE7).	Construction of interties and supporting infrastructure between existing conveyance facilities and export pumps could result in the permanent loss of riparian vegetation (AE7).	To the extent practicable, remove or exclude evaluation amphibian and reptile species from construction corridors before construction is initiated (M7).
Substantial increase in riparian habitat area and suitable habitat for associated species (BE8).	Construction of conveyance facilities and associated infrastructure could result in short-term or permanent loss or degradation of riparian habitat (AE8).	To the extent consistent with program objectives, avoid implementing transfers of water from sources that support riparian vegetation (M8).
Enhancement of existing riparian habitat values as a result of controlling invasive non-native plants (BE9).	Potential for permanent loss of riparian vegetation present on Delta islands that are used for storage (AE9).	To the extent consistent with program objectives, operate barriers in a manner that will not adversely affect the hydrology supporting riparian vegetation upstream of barriers (M9).
Potential for enhancement and long-term protection of existing riparian habitats associated with agricultural lands if enhancement activities also improve the management and quality of associated riparian habitats (BE10).	Potential for loss or degradation of existing habitat area along channels if construction activities result in removal of riparian vegetation (AE10).	To the extent consistent with program objectives, select Delta islands that support little or no riparian vegetation for use as storage facilities (M10).
Reduction in the use of herbicides and pesticides in or near existing habitat areas could improve the vigor of associated plant populations and result in an increase in invertebrate populations that are adversely affected by these agents (BE11).	Potential for loss or degradation of riparian habitat if reduction of contaminant loadings requires disturbance to stream channels that support riparian vegetation (AE11).	To the extent practicable, trap and relocate evaluated wildlife species that would be unlikely to escape from the inundation area of new reservoirs to suitable nearby habitat areas (M11).

Table J-2. Continued

Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program
Long-term protection of existing habitat areas from flooding that would result from levee failures (BE12).	Permanent loss of habitat if storage facilities and associated infrastructure are constructed in drainages that support valley/foothill riparian habitat (AE12).	To the extent consistent with program objectives, provide sufficient outflow from storage reservoirs sufficient to support the long-term maintenance of riparian vegetation downstream of storage reservoirs (M12).
Potential for increase in riparian habitat area if water transfers result in augmenting streamflows to alter hydrology of streams sufficiently to allow the natural establishment of riparian vegetation (BE13).	Potential for permanent loss or degradation of riparian habitat downstream of storage reservoirs if storage operations adversely affect current channel hydrology supporting existing riparian vegetation (AE13).	Manage recreational uses to avoid or reduce the likelihood for recreation-related impacts on sensitive plant populations and wildlife use areas (M13).
Potential for long-term increase in riparian habitat area if conveyance channel capacity is increased by setting back channel levees (BE14).	Fragmentation of riparian corridors and disruption of wildlife movement patterns if storage facilities inundate channels supporting riparian vegetation (AE14)	
Potential for increase in riparian habitat area if design and operation of storage islands provide suitable substrate and hydrologic conditions to support the natural and long-term establishment of riparian vegetation along storage island levees and shorelines (BE15).	Recreation-related activities potentially associated with new storage facilities could result in take of evaluated species (AE15).	
Potential for increased riparian habitat area if increased sediment transport increases the number and area of point bars and other depositional features along channels that would provide suitable substrates for the natural establishment of riparian vegetation (BE16).	Potential adverse effects of the program are not analyzed. The type and magnitude of potential adverse effects would depend on the type of specific program actions that are implemented (N/A).	
Localized increase and enhancement of riparian habitat suitable for the riparian brush rabbit along the lower Stanislaus River (BE17).	Likely to be no discernable adverse effects on existing habitat areas and associated evaluation species (N/E).	

D—051402

Table J-2. Continued

Potential Beneficial Effects	Potential Adverse Effects	Conservation Measures Incorporated into the Program
Potential beneficial effects of the program are not analyzed. The type and magnitude of potential beneficial effects would depend on the type of specific program actions that are implemented (N/A). Likely to be no discernable beneficial effects on existing habitat areas and associated evaluation species (N/E).		